

Claims:

- 5 1. An expansion card, which card (CP) is arranged to be fitted in an expansion card connection of an electronic device, such as a data processor, and which comprises a frame part (16—20), **characterized** in that the card (CP) is provided with an antenna structure (1—10) which is formed as a rod-like structure comprising a first end (S1) with an antenna part (1) for receiving and transmitting signals, and a second end (S2) placed movably inside said frame part (16—20), wherein said antenna structure (1—10) is arranged to be movable for inserting the antenna structure (1—10) in said card (CP) and for extending the first end (S1) outside said card (CP).
- 10 2. The expansion card according to claim 1, **characterized** in that it is a card-like wireless communication device (CP), wherein said frame part (16—20) is provided with means (14, 15, 17) for processing signals, and that the second end (S2) of said antenna structure (1—10) is provided with connecting means (4) for transferring signals between said antenna structure (1—10) and said means (14, 15, 17) for processing signals.
- 15 20 3. The expansion card according to claim 1 ~~or 2~~, **characterized** in that it is formed at least partly as a card (CP) complying with a standard, such as the PCMCIA standard, being preferably 85.6 mm long, preferably 54 mm wide and preferably not more than 3.3 mm, 5.0 mm or 10.5 mm thick.
- 25 4. The expansion card according to ^{claim 1} ~~any of the claims 1 to 3~~, whose frame part (16—20) comprises connector means (20) for connecting said card (CP) electrically to said expansion card connection, **characterized** in that the antenna structure (1—10) is arranged to be pushed out at the opposite end of said card (CP) with respect to said connector means (20).
- 30 5. The expansion card according to ^{claim} ~~any of the claims 1 to 4~~, **characterized** in that said antenna structure (1—10) is arranged to be pushed out by a spring means (11) fitted inside said card (CP).
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claim 1

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10. A method in the manufacture of an expansion card, which card (CP) is arranged to be fitted in the expansion card connection of an electronic device, such as a data processors, and which comprises a frame part (16—20), **characterized** in that the card (CP) is provided with an antenna structure (1—10) which is formed as a rod-like structure comprising a first end (S1) provided with an antenna part (1) for receiving and transmitting signals, and a second end (S2) placed movably inside said frame part (16—20), wherein said antenna structure (1—10) is arranged to be movable for inserting the antenna structure (1—10) in said card (CP) and for extending the first end (S1) outside said card (CP).

11. An antenna structure which is arranged to be fitted in a wireless communication device (CP), such as a mobile phone and an expansion card, which comprises a frame part (16—20) provided with means (14, 15, 17) for processing signals, **characterized** in that said antenna structure (1—10) is formed as a rod-like structure comprising a first end (S1) provided with an antenna part (1) for receiving and transmitting signals, and a second end (S2) which is to be placed movably inside said frame part (16—20) and which is provided with connecting means (4) for transferring signals between said antenna structure (1—10) and said means (14, 15, 17), wherein said antenna structure (1—10) is arranged to be movable for inserting the antenna structure (1—10) in said wireless communication device (CP) and extending the first end (S1) outside said wireless communication device (CP).

12. The antenna structure according to claim 11, **characterized** in that it is arranged to be pushed out by a spring means (11) fitted inside said frame part (16—20).

13. The antenna structure according to claim 11 ~~or 12~~, **characterized** in that it is arranged to be locked in its position with locking means (5, 10, 12, 13) fitted in connection with the second end (S2), which locking means (5, 10, 12, 13) comprise a position lever (5, 10) arranged to be deflected to the side direction and to return and arranged in a functional connection with designed lever guides (12, 13), which lever guides (12, 13) are arranged upon inserting said antenna structure (1—10) to deflect said position lever (5, 10) to a position which prevents the

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— the first position (A1) is arranged for bringing the antenna part (1) to the inside of or closer to said wireless communication device (CP) and the second position (A2) is arranged for bringing the antenna part (1) out of or farther from said wireless communication device (CP).

16. The arrangement according to claim 15, **characterized** in that
said position lever (10) is fitted at the second end (S2) of said antenna
10 structure (1—10) and that said lever guides (12, 13) are integrated in
said wireless communication device (CP).

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